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Debts and Career Plans of Osteopathic Medical Students in 1993

American Association of Colleges of Osteopathic Medicine

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American Association of Colleges of Osteopathic Medicine

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Executive Summary

After two consecutive years in which the indebtedness of senior osteopathic medical students grew faster than the general price level, the rise in debt of 1992-93 seniors was much more in line with the inflation rate. Seniors' indebtedness rose 2.7% from last year to an average of almost $82,000 in 1993. Though still quite high by historical standards, this year's level represents a more moderate rate of increase, compared to last year's growth of 6.7%. Along with that, the long-term expected income levels of 1992-93 seniors actually declined 3% from those expected by last year's seniors. Furthermore, the long-term career plans of this year's seniors shifted strongly toward group practices instead of partnerships.

In keeping with the spirit of health care reform and the call for greater emphasis on generalism among physicians, substantially more osteopathic medical school seniors planned to practice primary care medicine, compared to last year. In 1992-93, 37% of the seniors planned to practice in the primary care fields of general practice, general internal medicine, or pediatrics — a jump of 5 percentage points over the comparable figure for the 1991-92 seniors. Another 5% opted for obstetrics/gynecology, a field which is often considered to be a primary care specialty.

And by a large margin, general practice continues to be the single specialty most preferred by osteopathic medical students, with one-quarter of the seniors expressing a preference for this specialty and demonstrating once again osteopathic medicine's firm commitment to generalism.

While seniors' specialty plans have had some fairly sharp fluctuations in recent years, freshmen's plans for primary care fields have held rather steady at around 40% since 1988. Freshmen entering in 1992 continued on that same steady course.

Freshmen, after several years of consistently underestimating the debts they would accumulate by the time they graduated, made a major adjustment this year in their estimates. The 1992-93 freshmen expect to owe almost $93,000 on average when they graduate. Although this is a huge jump of more than 30% from the estimates made by last year's freshman class, it may turn out to be closer to the mark. In order to reach that expected level, the debts of graduating students would have to increase by about 4.2% per year for the next three years. Whether or not that rate of increase will occur depends on many hard-to-predict factors, including the trend of interest rates (which are currently starting to increase) and the amount of scholarship funds available to medical students. In any event, the debt expectations of the 1992-93 freshmen class seem much more realistic than previous ones.

Factors Affecting Specialty Choice

The past decade has seen both rapidly rising debts of medical students and declining interest in the primary care fields of medicine, leading many observers to suspect that high debt levels may be causing more students to pursue the generally higher-paying specialties. However, despite many studies of the issue in both allopathic and osteopathic medical schools, a strong relationship between debt and specialty choice has not been established. In annual surveys conducted by the American Association of Colleges of Osteopathic Medicine (AACOM), usually fewer than 15% of the seniors say that debt played any role in their choice of specialty.

In order to probe more deeply into the relationship between debt and specialty choice, AACOM recently conducted a special study of the 1991-92 senior class of osteopathic medical students. The students were asked to rate the importance of a large number of possible reasons for their specialty choice. The 35 possible determinants presented to the students for rating covered a wide range — from income expectations to intellectual content of the specialty.

The results of this special survey identified nine underlying factors that seemed to be the most basic set of determinants of seniors' specialty choices. These are listed below in order of importance to seniors planning careers in primary care and non-primary care fields:

Factors Influencing the Specialty Choice of 1991-92 Seniors

Seniors Choosing Primary Care Fields (Factors ranked in order of importance)	Seniors Choosing Non-Primary Care Fields (Factors ranked in order of importance)
1. An Orientation to People Rather than Techniques	1. Prestige/Income
2. Intellectual Content of the Specialty	2. Skills and Abilities
3. Peer Influence	3. A Technical Orientation
4. Debt	4. The Academic Environment
5. Lifestyle	5. Lifestyle
6. The Academic Environment	6. Peer Influence
7. A Technical Orientation	7. Intellectual Content of the Specialty
8. Skills and Abilities	8. Debt
9. Prestige/Income	9. An Orientation to People Rather than Techniques

Those who planned careers in primary care fields rated the factors in almost the exact opposite order of those planning to specialize in non-primary care fields. Note the rankings of "Prestige/Income," "Skills/Abilities," "Technical Orientation," and "People Orientation" by the two groups. Also, "Debt" ranked next to last in importance within the non-primary care group, whereas the primary care group gave it more weight.

The issue of what factors affect the specialty choice decision is complex. These data indicate that many of the potential determinants are highly intercorrelated. Therefore, the large number of possible reasons for choosing a specialty can be reduced to a much smaller set of basic factors, the components of which are viewed quite differently by students depending on whether they plan careers in primary or non-primary care.

Plans for Graduate Medical Education

Over the past three years, the proportion of osteopathic medical school seniors planning to enter allopathic residencies has increased from 36% of 1991 seniors to 51% of 1992-93 seniors. Some analysts see this trend as posing a serious problem for graduate osteopathic medical education and have proposed sweeping reforms that would put renewed emphasis on primary care training — the traditional strength of osteopathic medicine.

Freshmen entering in 1992 were generally much less inclined than seniors to plan an allopathic residency; but like seniors, the number of freshmen planning to do so is rising sharply.

Seniors cited the following reasons for choosing allopathic rather than osteopathic residencies (listed in order of the most frequently to the least frequently cited):

- Perceive better training available in allopathic program
- Their preferred osteopathic residency was not available in their preferred geographic location
- Desired specialty training was not available in osteopathic programs
- Other reasons (improve job opportunities, military, etc.)
- Higher pay
- Better chance of being accepted in allopathic program

Among the 28% of seniors who cited "Other reasons" for choosing an allopathic residency, the most frequently cited reason was that it would improve their job opportunities and professional standing. About one-third of the group gave this reason. Another 20% of this group cited a military obligation. Other frequently given reasons were "more program choices" (10%), "geographic considerations" (9%), "academic/research career interests" (7%), and "family considerations" (7%).

Clearly there are a variety of factors at work in students' decisions to pursue an allopathic or osteopathic residency, but the desire for subspecialty training and professional acceptance seemed to be at the forefront for seniors in 1993. There is very little evidence in the data to show that debt was a factor in the immediate postgraduate plans of most seniors.

Freshmen in 1992-93 viewed this issue somewhat differently from the seniors. Only 24% of the freshmen planned an allopathic residency after internship, compared to 49% who planned an osteopathic residency. But as recently as 1990, only 13% of freshmen planned an allopathic residency.

Debt and Socio-Economic Factors

A number of socio-economic factors affect the amount of debt accumulated by senior osteopathic medical students, including parental income and financial dependency. The amount of scholarship funds received by the students is certainly one of the more important factors. Seniors with no scholarship support owed an average of $87,100 at graduation, compared to $42,000 owed by those with scholarships totaling $50,000 or more.

The good news for this year is that more seniors than last year received scholarships, and the average amount received was also greater. About 41% of seniors graduating in 1993

Photo courtesy of Michigan State University College of Osteopathic Medicine

reported some scholarship funds during their medical school training (up from 32% last year), with an average scholarship amount totaling $25,700 (up from $18,600 last year). The typical senior in 1992-93 (including those who did not receive any scholarships) received $10,400 in scholarship funds.

In general, students from families with higher parental incomes have less debt. The average parental income reported by seniors was about $43,000.

Planned Location

Osteopathic medical students tend to establish their practices in the states where they attended medical school. The states most frequently cited as being the planned practice location by 1992-93 seniors were Texas, Florida, Illinois, New York, California, Michigan, Pennsylvania/New Jersey (tie), Oklahoma/Ohio (tie) in that order. Each of these states has an osteopathic medical school. Overall, 46% of the seniors and 44% of the freshmen planned to practice in their medical school's state.

Furthermore, osteopathic medical students have a tendency to practice in locations that are similar in size to their hometowns. In 1993, 52% of the seniors came from small towns or underserved sections of large cities, and 40% of seniors plan to go to similar locations to practice.

The Survey

The data in this report are derived from AACOM's 12th annual survey of freshmen and seniors in 15 of the 16 U.S. osteopathic medical schools, conducted with the assistance of school administrators and faculty. Next year the newly-founded 16th school in Erie, Pennsylvania — whose first entering class was in 1993 — will be included. This survey is for the academic year 1992-93 and focuses mainly on the financial and debt situation of the students, but also collects important information on their background and career plans. The response rate for seniors was 66%. For freshmen, a 25% sample was sought, and 35% responded. More details about the survey are provided in Section III.

I. Indebtedness, Scholarships, and Socio-Economic Background

Trends in Student Indebtedness

Indebtedness of seniors in 1992-93 rose a moderate 2.7% from last year's level, reaching an average of $81,900 (Table 1). Over the past five years, the typical senior's debt has increased at an annual rate of slightly less than 5% per year, so this year's increase is far below recent norms. Only 4% of seniors were debt-free at graduation from osteopathic medical school. For those with debt, the mean was $85,700. Seniors' debt ranged from zero to more than $180,000.

For the first time since 1985, freshmen expected their debt at graduation to be greater than the seniors' actual debt (Table 1). Freshmen entering in 1992 expected their debt at graduation to be $92,800 on average. That figure is 13% higher than the 1993 seniors' actual debt, and about 30% higher than the expected debt of 1991 freshmen. But that huge jump in freshmen's expectations may be justified and realistic because — as was pointed out in last year's report — recent freshmen classes have consistently underestimated their debt at graduation. If seniors' debts continue to increase at about 5% per year, the freshmen entering in 1992 would have average debts of close to $95,000 by the time they graduate in 1996, just slightly higher than they are anticipating.

Table 1
Indebtedness of Osteopathic Medical Students, 1983-1993

	Seniors			Freshmen		
Academic Year	Average Debt	Increase from Previous Year	Percent with Debt	Average Debt Expected at Graduation	Increase from Previous Year	Expected Percent with Debt
1982-83	$31,000	---	92%	$57,000	---	88%
1983-84	40,000	29.0%	92%	58,000	1.8%	90%
1984-85	49,600	24.0%	N.A.	60,300	4.0%	N.A.
1985-86	55,400	11.7%	93%	58,300	-3.3%	90%
1986-87	60,000	8.3%	92%	59,400	1.9%	90%
1987-88	64,700	7.8%	N.A.	63,300	6.6%	N.A.
1988-89	69,700	7.7%	93%	68,900	8.8%	89%
1989-90	71,500	2.6%	95%	68,800	0.0%	93%
1990-91	74,800	4.6%	95%	72,400	5.2%	91%
1991-92	79,800	6.7%	94%	71,100	-1.9%	90%
1992-93	81,900	2.7%	96%	92,800	30.5%	93%

How Scholarships and Socio-Economic Factors Affect Student Debt

This year, the amount of scholarship funds received by students during their medical education appears to be the single most important factor in determining the amount of debt incurred by graduation (Figure 1). Seniors with no scholarship support owed an average of $87,100 at graduation, compared to $42,000 owed by those with scholarships totaling $50,000 or more.

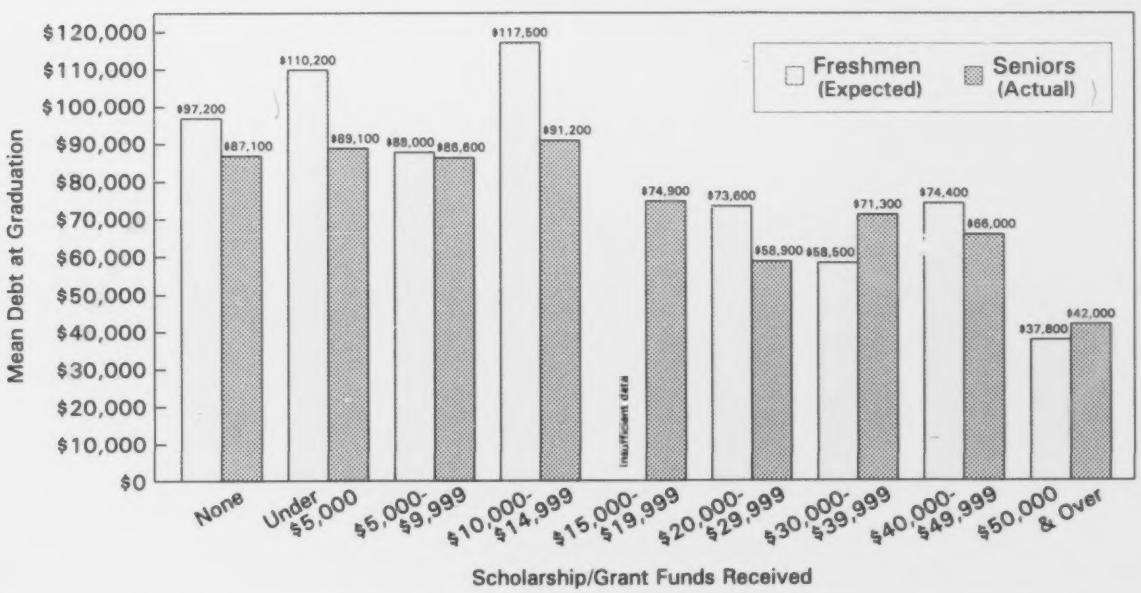
With all other factors held constant, seniors' indebtedness decreased by about $360 for every $1,000 received in scholarship funds.

More seniors than last year received scholarships, and the average amount received was also greater. About 41% of seniors graduating in 1993 reported receiving some scholarship funds during their medical school training (up from 32% last year), with an average scholarship amount totaling $25,700 (up from $18,600 last year). The typical senior in 1992-93 received $10,400 in scholarship funds.

Freshmen's expectations regarding scholarships also rose this year. About 26% of 1992-93 freshmen expect to receive scholarship funds during medical school, up from 16% last year.

Figure 1
Debt and Scholarships

Scholarship funds were the single most important factor in reducing debt in 1993.



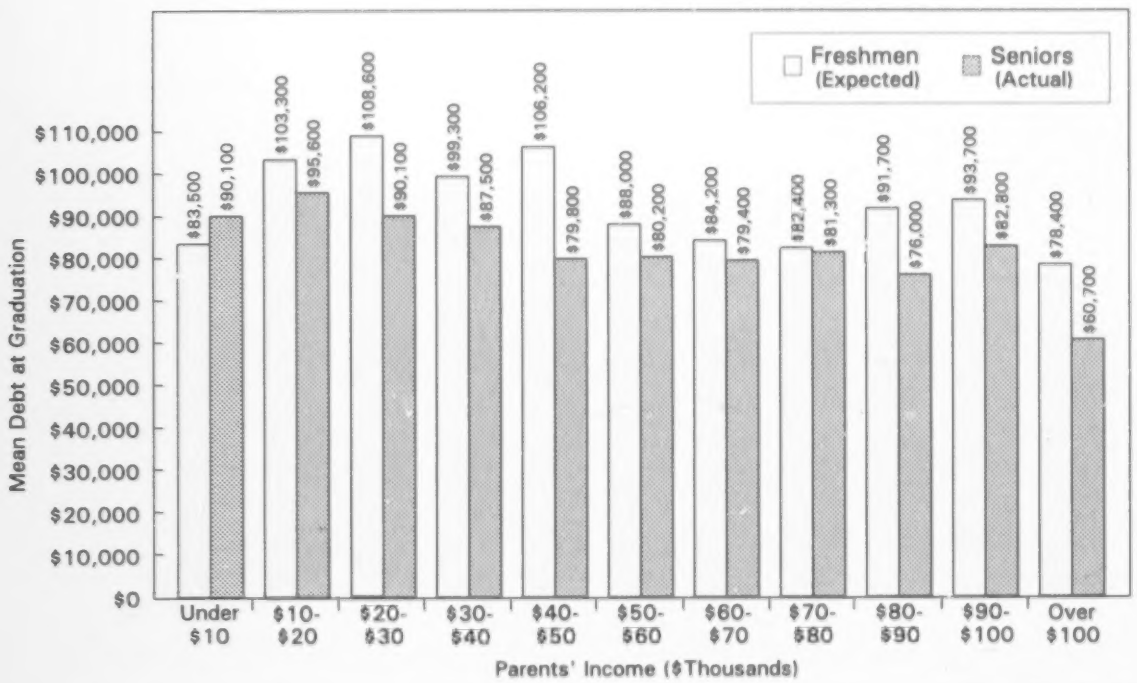
Debt and Parental Income

Students' debt levels are also affected by a variety of other socio-economic factors ranging from parental income to dependency status to ethnicity. The data collected on this survey clearly demonstrate the logical connection between debt levels and the amount of support that a student's family is able to provide. As Figure 2 illustrates, debt levels are inversely related to parental income. Seniors from more affluent families generally reported lower debt levels than others, and freshmen from more affluent families expect to owe less at graduation than those whose parents had lower incomes.

The average parental income reported by 1992-93 seniors was about $43,000; the average reported by freshmen was about $48,000. Almost half (46%) of seniors reported parental incomes of less than $40,000; 31% reported parental income of less than $30,000. Almost 41% of freshmen reported parental incomes of less than $40,000; 26% reported parental incomes of less than $30,000.

Figure 2
Debt and Parents' Income

Students' debt declined as parental income increased.



Debt, Financial Independence, and Other Demographic Variables

Not surprisingly, debt levels also depend on whether or not students are financially independent of their parents. Students who said they were financially dependent tend to accumulate lower debts. For seniors, being financially dependent typically meant a saving of more than $28,000 of indebtedness at graduation (Figure 3A on page 9). For freshmen, dependency status typically meant a saving of more than $27,000 in debts expected by graduation (Figure 3B on page 9)

Other demographic factors that have lesser impacts on debt levels are gender, marital status, ethnicity, age, and number of dependents. Both seniors and freshmen in the underrepresented minority groups (Blacks, Hispanics, and Native Americans) had (or expected to have) higher debts than whites or Asians (Figures 3A & 3B on page 9). Married seniors had higher debts than unmarried ones, but the difference was small. Gender differences in debt also tended to be small, and — for seniors — were not statistically significant. However, female freshmen expected higher debts than males.

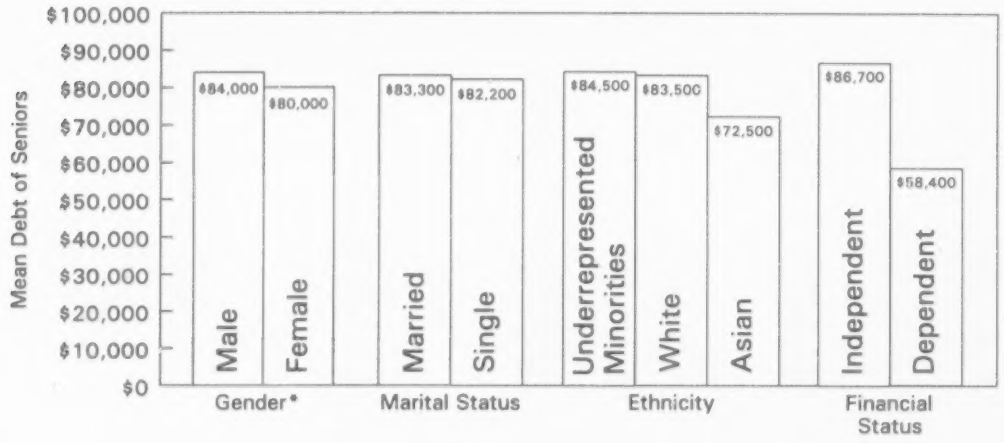
Photo courtesy of University of North Texas Health Science Center at Fort Worth - Texas College of Osteopathic Medince

Photo courtesy of Ohio University College of Osteopathic Medicine

Figure 3(A and B)

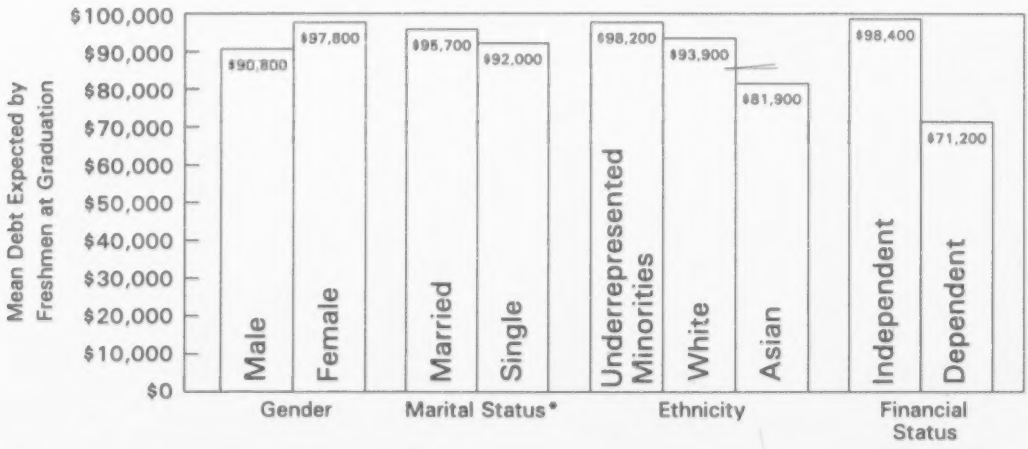
A. Debt and Demographic Factors: Seniors in 1992-93

Being financially independent of parents increased debt by 49% for seniors in 1993.



B. Freshmen in 1992-93

Being financially independent of parents increased expected debt by 38% for 1992 freshmen.



**Differences in mean debt for these groups are not statistically significant at P=.05.*

Debt and Number of Dependents

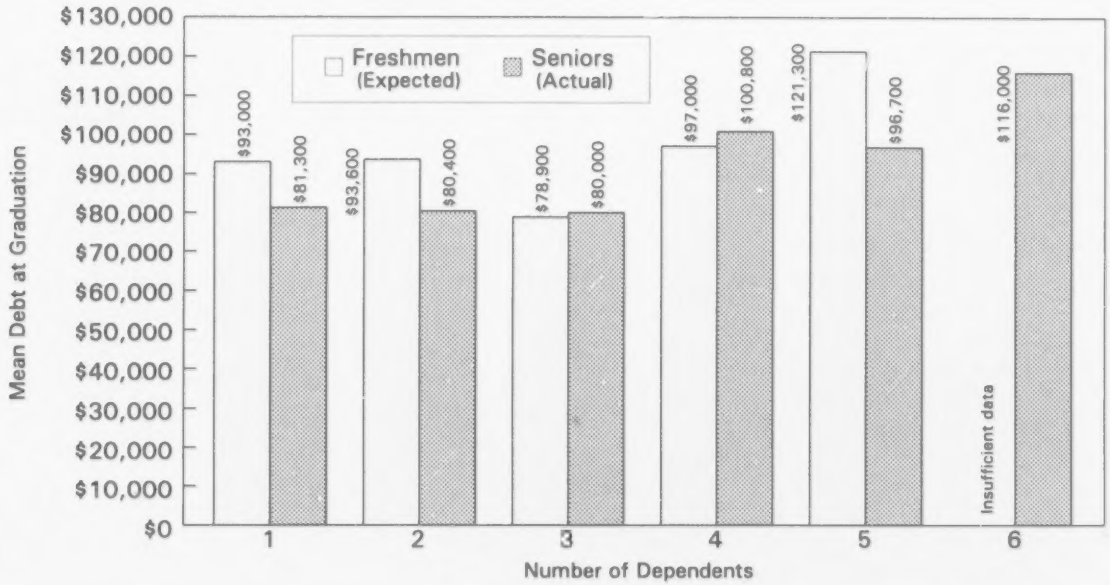
Students with more dependents to support generally reported higher debts than those with fewer dependents (Figure 4). However, the effect of number of dependents on debt was slight until the number of dependents (including the student) exceeded three. Those with three or fewer dependents had very similar debt levels; but after three, debts accelerated sharply.

The number of dependents reported by seniors ranged from one to nine. About 52% of seniors had no dependents other than themselves. For these seniors, debts averaged $81,300; those with six dependents reported average debts of $116,000.

The number of dependents reported by freshmen ranged from one to eight, but 67% of the freshmen reported only one dependent. Freshmen with five dependents expected debts to accumulate to more than $121,000. There were not enough cases to provide good estimates of expected debt for freshmen with more than five dependents.

Figure 4
Debt and Dependents

Debt accelerated sharply for students with more than three dependents.



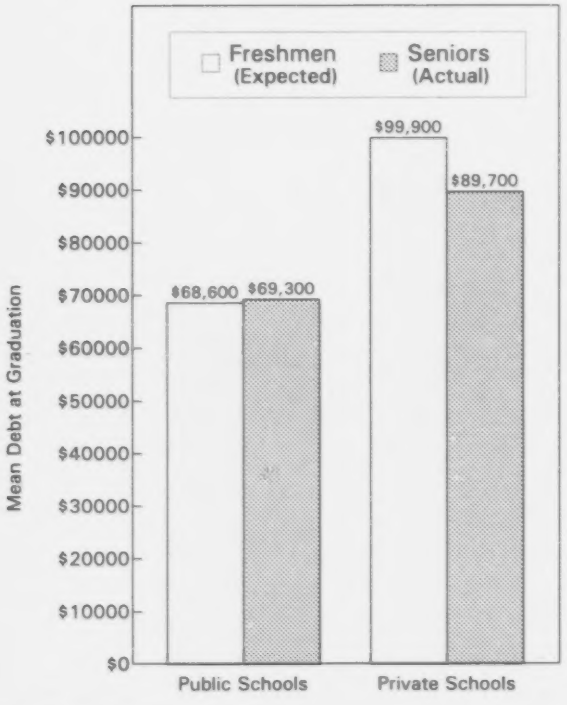
Debt and Type of School

Among the more important factors affecting debts of medical students is whether they attend a public or a privately-owned school. Public medical schools receive funds from state governments to support their educational and public service programs; private medical schools generally do not receive such funds. Public schools therefore are generally able to charge lower tuition for students who are residents of the state in which the school is chartered. That, of course, results in less borrowing for the public school student and generally lower debts at graduation.

As can be seen in Figure 5, public school seniors had lower debts in 1992-93 than those in private schools, and public school freshmen entering in 1992 expect to owe considerably less at graduation than their private school colleagues.

Figure 5
Debt and Type of School

Seniors in publicly-supported schools had lower debts in 1993.



Type of Loan

As in past AACOM reports, the indebtedness data cited here include four general categories of loans for medical students:

1) loans insured by federal and state governments
   - Stafford Loans (formerly called Guaranteed Student Loans, GSL)
   - Health Education Assistance Loans (HEAL)
   - Perkins Loans (formerly National Direct Student Loans, NDSL)
   - Supplemental Loans to Students (SLS/PLUS)
   - Health Professions Student Loans (HPSL)
   - loans insured by state governments
2) personal loans for medical education from non-family sources such as foundations, associations, etc.
3) money borrowed by the students' families for osteopathic medical school that must be repaid by the student
4) outstanding debt incurred by students to finance their undergraduate college education.

In 1993, the borrowing limits on the Stafford and Supplemental loan programs were increased. Effective July 1, 1993, the limit on the SLS program was increased from $4,000 to $10,000 per year with a program maximum of $73,000. Effective October 1, 1993, the limit on Stafford loans was increased from $7,500 to $8,500 per year with a program maximum of $65,000 (including undergraduate loans).

In terms of the number of students utilizing each source of loans, the Stafford program continues to

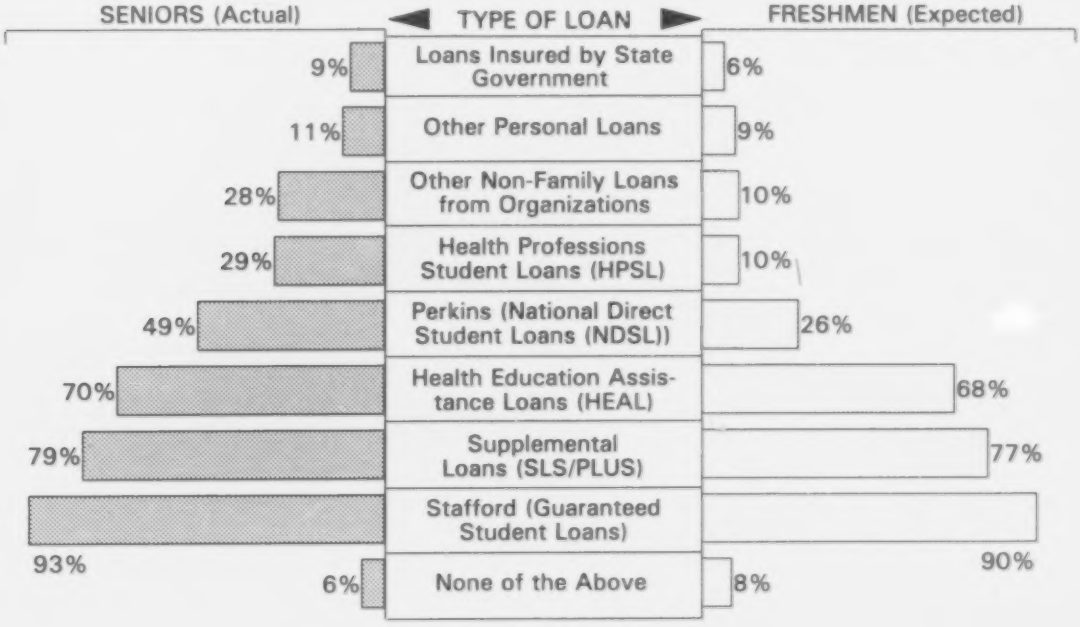
lead the way (Figure 6). Almost all seniors (93%) had this type of loan, and 90% of freshmen expect to utilize it or have already done so.

Loans to students under the Health Education Assistance program (HEAL) continue to provide the largest dollar amounts, averaging $43,800 for seniors. That's an increase of 5.3% from the $41,600 reported by the previous senior class. Stafford loans provided the second largest amount, averaging $29,000 for seniors.

Freshmen also expect to rely most heavily on HEAL for their medical education. They expect to borrow $53,700 on average by the time they graduate, up 12% from the previous freshman class.

Figure 6
Distribution of Borrowers

Most students have loans from multiple sources, with the Stafford (Guaranteed Student Loan) program being the leading source in terms of the proportion of students borrowing from it.



Loan Repayment

Seniors expect it will take an average of 11.8 years to repay their loans, down from last year's 12.6 years. This year's freshmen — who expect to accumulate much more debt than last year's freshmen — also expect to take longer (10.9 years on average) to repay it. Last year's freshmen expected to repay debt in 10 years.

About 57% of seniors and 64% of freshmen said they plan to consolidate their loans in order to facilitate repayment.

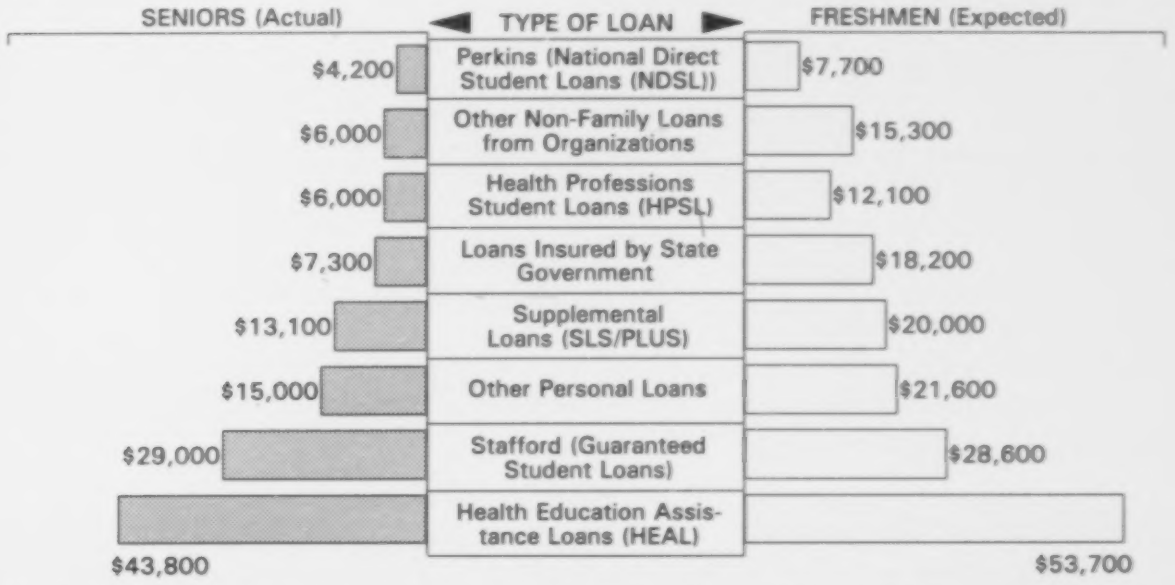
Financial Counseling

About 60% of seniors felt they received adequate financial aid information at admission; only 3% said they received no information. However, 37% of seniors felt they needed more information. Identical results were reported by seniors regarding the advice they received during their enrollment period.

Almost all freshmen received some financial aid counseling at admission. About 64% said they

Figure 7
Average Loan Amount*

HEAL continues to provide the largest dollar volume of loans for osteopathic medical students.



**This chart shows the average loan amount based only on those who borrowed (or expect to borrow) from each source.*

received adequate information at admission, but 36% felt they could have used more information.

Only 16% of freshmen reported that they had discussed sources of financial aid with their school representative. On the other hand, 76% reported discussions about refinancing to adjust interest on loans.

Photo courtesy of
College of Osteopathic Medicine of the Pacific

Photo courtesy of University of New England
College of Osteopathic Medicine

II. Career Plans

Plans for Graduate Training

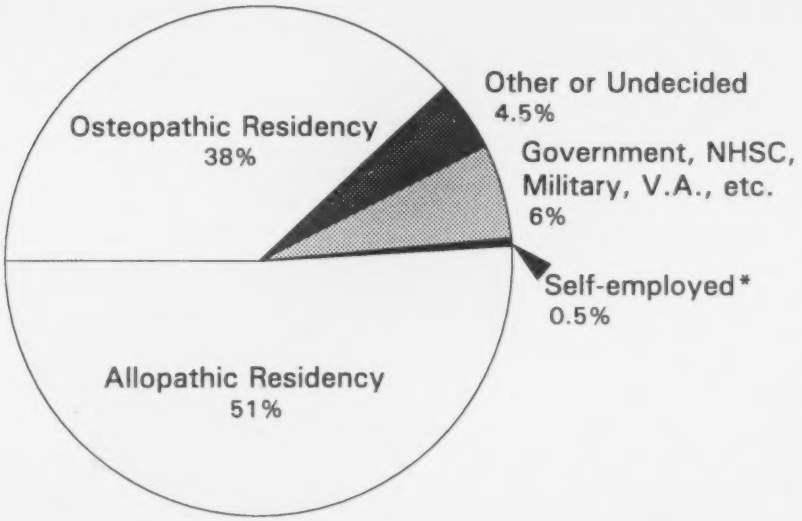
One of the more dynamic trends in osteopathic medical education in recent years has been the rapidly growing number of D.O.s who enter allopathic residency programs for their graduate training. For the past three years, AACOM has been tracking this trend through its *Annual Survey of Debts and Career Plans*. During this time the proportion of osteopathic medical school seniors planning to enter allopathic residencies has increased from 36% of 1990-91 seniors to 51% of 1992-93 seniors. In 1991, an equal number (36%) of seniors planned to enter osteopathic residencies, but in the latest graduation cohort in 1993, only 38% planned to do so. The remaining 11% of 1992-93 seniors plan to enter graduate training in government or military programs or are undecided (Figure 8A on page 15).

Freshmen are generally much less inclined than seniors to plan an allopathic residency; but, like seniors, the number of freshmen planning to do so is rising sharply.

Allopathic residencies were opened to osteopathic medical school graduates in 1969, when the Accreditation Council on Graduate Medical Education changed its regulations. But the number of osteopathic medical school graduates switching to allopathic residencies remained small until the early 1980s. Then various factors in both the allopathic and osteopathic communities coalesced to accelerate the movement.

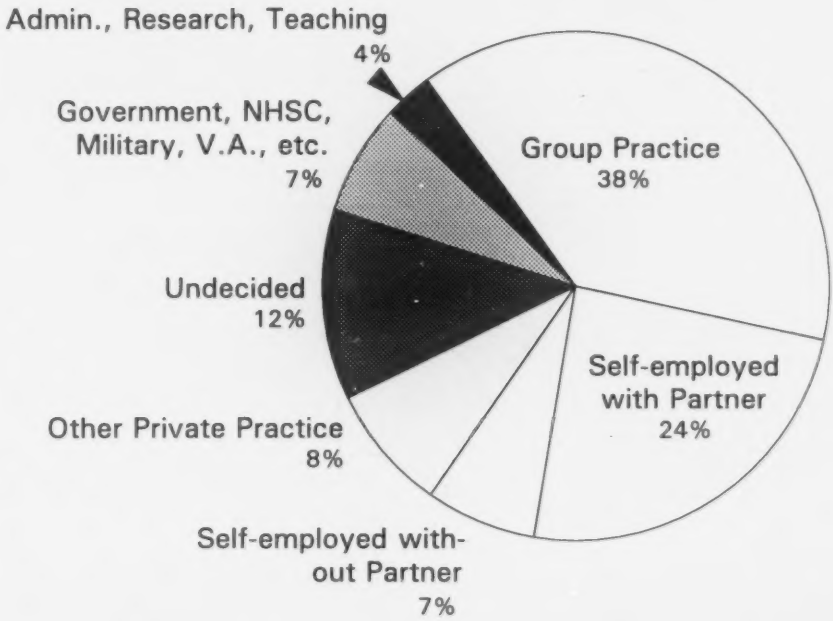
Figure 8(A and B)

A: Seniors' Immediate Postgraduate Plans (After Internship)



*Self-employed includes practicing medicine with or without a partner or as part of a group practice.

B: Seniors' Long-Range Career Plans



To learn more about the motivations of students choosing allopathic residencies, AACOM's survey this year asked them to select their reasons for doing so from a menu of six possible responses. The results are as follows (note that the percentages total more than 100% because students were asked to check all responses that applied)

- 56% perceive that better training was available in allopathic programs
- 52% said their preferred osteopathic residency was not available in their preferred geographic location
- 29% desired specialty training not available in osteopathic programs
- 28% gave "other reasons"
- 25% cited higher pay
- 15% said they had a better chance of being accepted into an allopathic program.

Among the 28% of seniors who selected "other reasons" for choosing an allopathic residency, the most frequently cited reason was that it would improve their job opportunities and professional standing. About one-third of the group gave this reason. Another 20% of this group cited a military obligation. Other frequently given reasons were "more program choices" (10%), "geographic considerations" (9%), "academic/research career interests" (7%), and "family considerations" (7%).

Clearly there are a variety of factors at work in students' decisions to pursue an allopathic or osteopathic residency, but perceived quality, availability, and the desire for subspecialty training seemed to be at the forefront for seniors in 1992-93. The message is that many of these students see an allopathic residency as providing certain advantages in terms of easing the transition to professional acceptance.

Freshmen viewed this issue somewhat differently from the seniors. Only 24% of the 1992-93 freshmen planned an allopathic residency after the internship, compared to 49% who planned an osteopathic residency. But as recently as 1990, only 13% of freshmen planned an allopathic residency.

The freshmen in 1992-93 who planned an allopathic residency provided the following reasons for their decisions (again, note that the percentages total more than 100% because students were asked to check all responses that applied):

- 55% expected that their preferred osteopathic residency would not be available in their preferred geographic location
- 41% desired specialty training not available in osteopathic programs
- 40% perceived that better training was available in allopathic programs
- 34% gave "other reasons"
- 24% said they had a better chance of being accepted into allopathic programs
- 19% cited higher pay.

From these results it can be seen that geography played a slightly more important role in planned residency selection among freshmen than it did among seniors; 55% of freshmen cited it as the reason for planning an allopathic residency compared to 52% of seniors. A higher proportion of freshmen than seniors also had "other reasons" for planning an allopathic residency. For the 34% of freshmen who gave other reasons, a military obligation was most frequently cited, closely followed by that recurring theme, "professional acceptance."

There is very little evidence in the data to show that debt was even a minor factor in the immediate postgraduate plans of most seniors.

Long-Range Career Plans

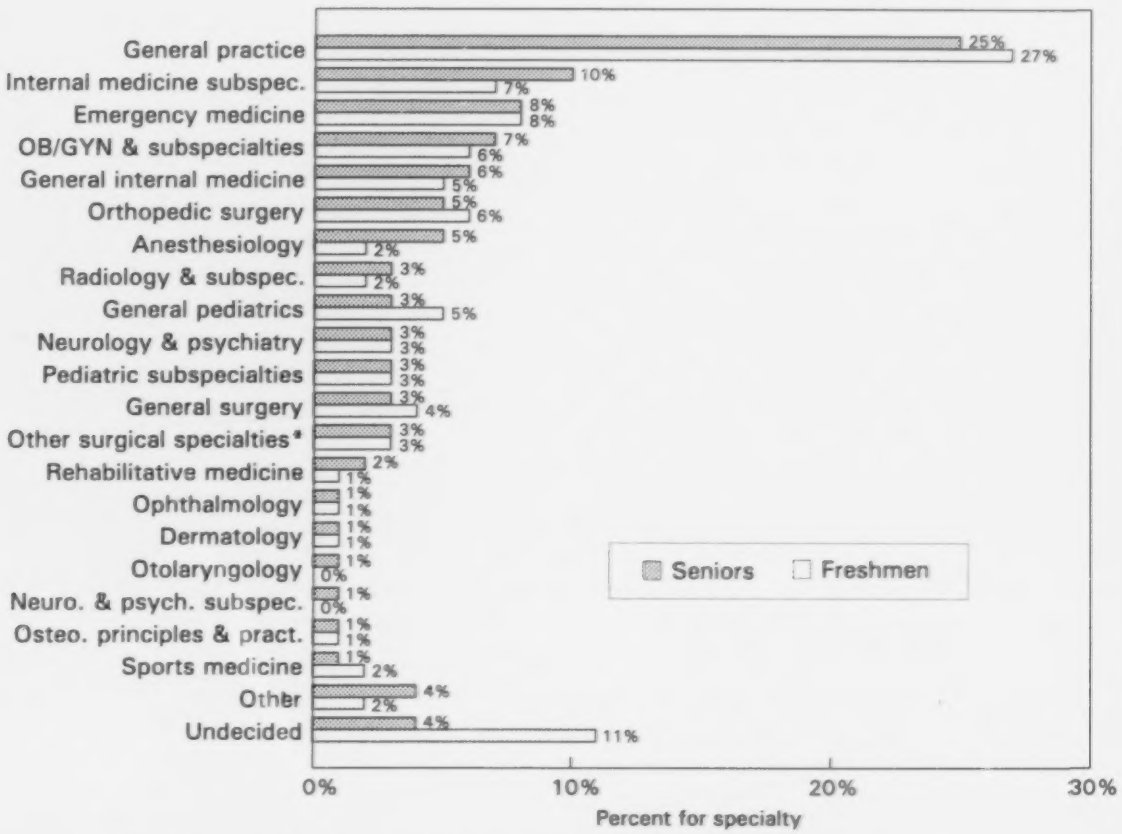
For the longer term, the career plans of seniors reflect a decided shift toward employment in group practices and away from partnerships. In 1993, 38% of seniors planned to enter group practices, up from 29% last year. On the other hand only 24% planned to enter partnerships (Figure 8B), down from 38% last year and 36% in 1991.

Specialty Choice

Seniors' preferences for primary care specialties rebounded in 1993 after a rather sharp drop last year. This year 37% of the seniors planned to practice in the primary care fields of general practice, general internal medicine, or pediatrics (Figure 9). Last year the comparable figure was 32% (Figure 10). Freshmen's plans for primary care careers held steady at 40%, the same as last year.

Figure 9
Specialization

General practice continues to be the single most preferred specialty of osteopathic medical students.



*Includes colon/rectal, neurological, plastic, thoracic, pediatric, and vascular

General practice remains by far the dominant specialty of osteopathic medical students. About 25% of seniors and 27% of freshmen intend to enter general practice. Both seniors and freshmen expressed greater interest in this specialty compared to last year.

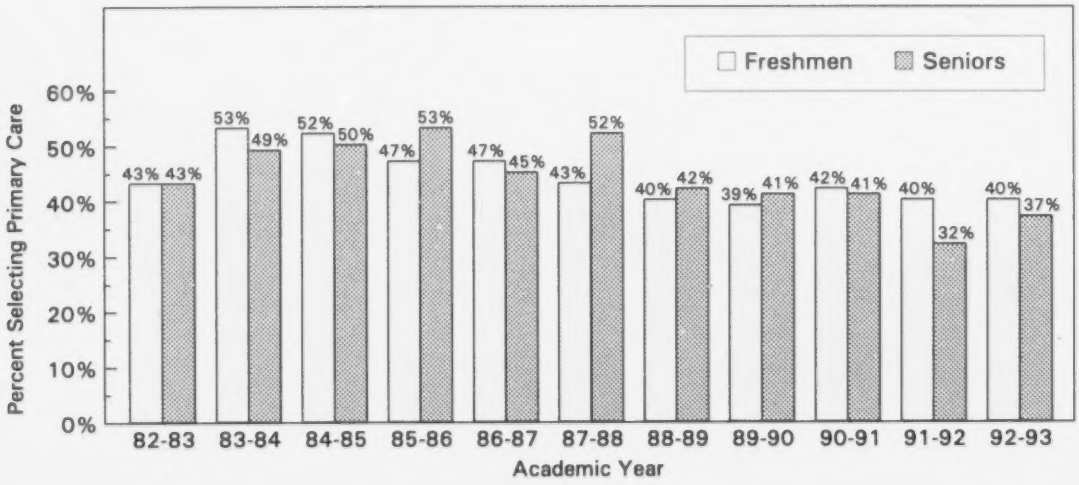
General internal medicine was the choice of 6% of seniors and 5% of freshmen, practically unchanged from last year. General pediatrics and pediatric subspecialties were preferred by 6% of seniors and 8% of freshmen.

In order to provide data consistent with prior reports in this series, primary care is defined here to include general practice, general internal medicine, general pediatrics, and pediatric subspecialties. Other definitions have sometimes included specialties such as Ob/Gyn and psychiatry. Although the Council on Graduate Medical Education[1] defines primary care as including only general practice, general internal medicine and general pediatrics, it is clear that a certain amount of primary care is also provided by physicians in other specialties. This raises the possibility that defining primary care in terms of specialties might not be the best way to measure the amount being provided in practice.

Seven percent of the seniors planned to specialize in Ob/Gyn and another 3% planned to specialize in neurology/psychiatry. If these two fields are included in the definition of primary care, the percentage of seniors planning such careers would rise to 47%.

Figure 10
Trends in Primary Care as Career Choice, 1983 - 1993

Seniors' preference for primary care fields rose by 5 percentage points in 1993 after a sharp drop in 1992.



[1]Council on Graduate Medical Education. Fourth Report, Jan. 1994.

Determinants of Specialty Choice

Why do students choose one specialty over another? The answer to that question could supply valuable information to the current policy debate surrounding the issue of how to promote generalism among physicians and students.

In an attempt to gather some data on this question, AACOM conducted a special study of senior osteopathic medical students graduating in 1992. The students were asked to rate the influence of a large number of possible reasons for their choice of specialty. The 35 possible reasons covered a wide range — from level of indebtedness and income expectations to intellectual content of the specialty.

From the responses of the 689 seniors who participated, nine underlying factors were identified that seemed to be the most basic set of determinants of their specialty choices. The nine basic factors are shown in Table 2 in order of importance to seniors choosing either primary care or non-primary care specialties.[1] In 1992, about 32% of the respondents planned careers in primary care fields and 68% fell into the non-primary care group.

Several results of this analysis are worth noting:

1) The 1991-92 seniors choosing primary care fields rated the factors quite differently from the the seniors choosing non-primary care fields.

2) In fact, the rankings are just about reversed for the two groups. For the primary care group, "People Orientation" ranked first and the "Prestige/Income" factor last, exactly the opposite of the non-primary care group. Similarly, "Intellectual Content" is given high ratings by the primary care group, but is rated near the bottom by the non-primary care group. The "Skills/Ability" factor is important for those choosing non-primary care specialties, but is unimportant for the primary care group.

3) In this type of analysis, the names given to identify each of the nine basic factors are largely subjective decisions of the analyst and are based on the correlations observed among the original variables. For example, in the case of the "People Orientation" factor, several original variables that were highly correlated made this name a rather obvious choice. The highly intercorrelated set of original variables were:

- Emphasis on people skills rather than technical skills
- Strong emphasis on patient education and prevention
- Strong emphasis on primary care
- Likes type of patients (age, sex, medical problems).

4) The medical literature often treats things like prestige, income, and lifestyle as separate and independent factors when talking about medical careers; but this analysis shows that prestige and income are highly correlated variables among senior osteopathic medical students (and probably among allopathic students also) and should be treated as a single basic factor. Lifestyle is identified as a separate basic factor and is rated squarely in the middle range of importance by both groups. Debt is rated fairly high by the primary care group but is not very important to the non-primary care group in the context of the specialty choice decision.

5) Since the factors rated highly important by the primary care group are almost reverse images of those rated highly important by the non-primary care group, it is imperative to treat these two groups separately in any analyses of specialty choice data. If this is not done, and only the total cohort is studied, then the results tend to cancel out and the true factors will not be apparent.

Although the results of this study of seniors graduating in 1992 were not available in time to be included in the 1992 edition of this report, AACOM's survey has been revised to collect the same data from each subsequent senior class. The 1994 edition of this report will present more recent results.

Photo courtesy of West Virginia School of Osteopathic Medicine

Table 2
Nine Basic Factors in Specialty Choice Decisions of Seniors in 1991-92

Seniors Choosing Primary Care Specialties (Factors ranked in order of importance)	Seniors Choosing Non-Primary Care Specialties (Factors ranked in order of importance)
1. People Orientation	1. Prestige/Income
2. Intellectual Content	2. Skills/Ability
3. Peer Influence	3. Technical Orientation
4. Debt	4. Academic Environment
5. Lifestyle	5. Lifestyle
6. Academic Environment	6. Peer Influence
7. Technical Orientation	7. Intellectual Content
8. Skills/Ability	8. Debt
9. Prestige/Income	9. People Orientation

[1]Factor rankings were derived by the author from the mean score given to each factor by members of each group. For example, the mean score given to the "People Orientation" factor by the primary care group was 0.69, which was the highest mean score given to any factor. Therefore, "People Orientation" was considered to be ranked first by the primary care group.

On the other hand, "People Orientation" had a mean factor score of -0.32 for the non-primary group, which was the lowest score given to any factor by this group. Therefore, "People Orientation" was considered to be ranked last by the non-primary care group.

Photo courtesy of Philadelphia College of Osteopathic Medicine

Income Expectations

Health care reform and proposals for capping health care expenditures are having a decided effect on osteopathic medical students' income expectations. The curve of expected income vs. age has dropped sharply this year compared to last year's. Both freshmen and seniors expect lower incomes after 10 years in practice than they did in 1993 (Figure 11). However, 1992-93 seniors still expect to earn more than $80,400 on average during their first year after completing their internship or residency, up from about $72,900 last year.

After five years in practice, seniors expect to earn $131,000 on average, compared to $126,100 last year.

But after 10 years in practice, the 1992-93 seniors' expected income of $180,000 drops below the 1991-92 seniors' expectations of $185,500. Similarly, freshmen entering in 1992 expected incomes of $158,000 after 10 years in practice, whereas the previous freshman class expected $164,300 on average.

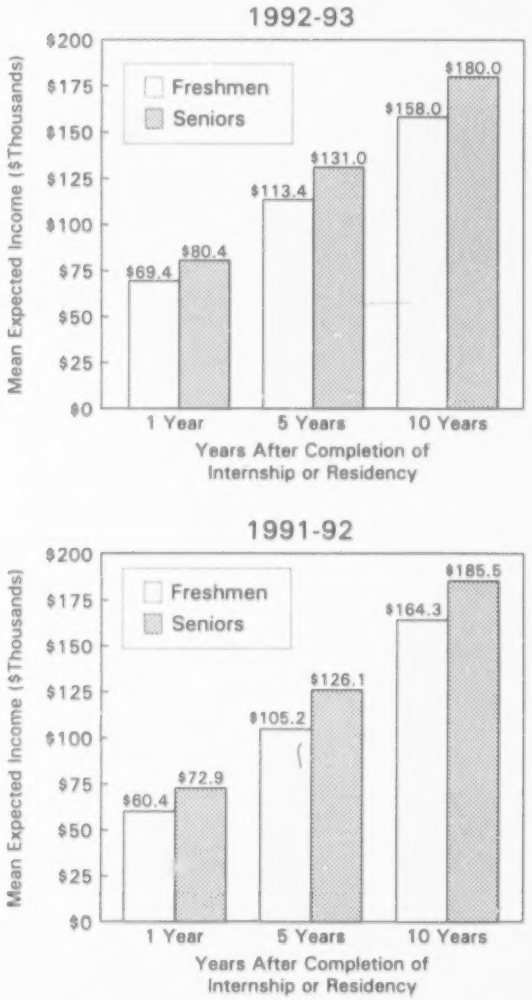
Years of Graduate Training

Both seniors and freshman expect to spend about four years in postgraduate training programs including internships and residencies. The average number of years of postgraduate training expected by seniors was 4.3 years, and ranged from 1 to 10 years. Just 6% of seniors planned only a single year of postgraduate training.

Freshmen's expectations for postgraduate training were similar to seniors'. The average number of years of postgraduate training expected by freshmen was 4.4 years, and also ranged from 1 to 10 years. Only 4% of freshmen planned a single year of postgraduate training.

Figure 11
Expected Net Income

Long-term income expectations shifted downward for students in 1992-93.



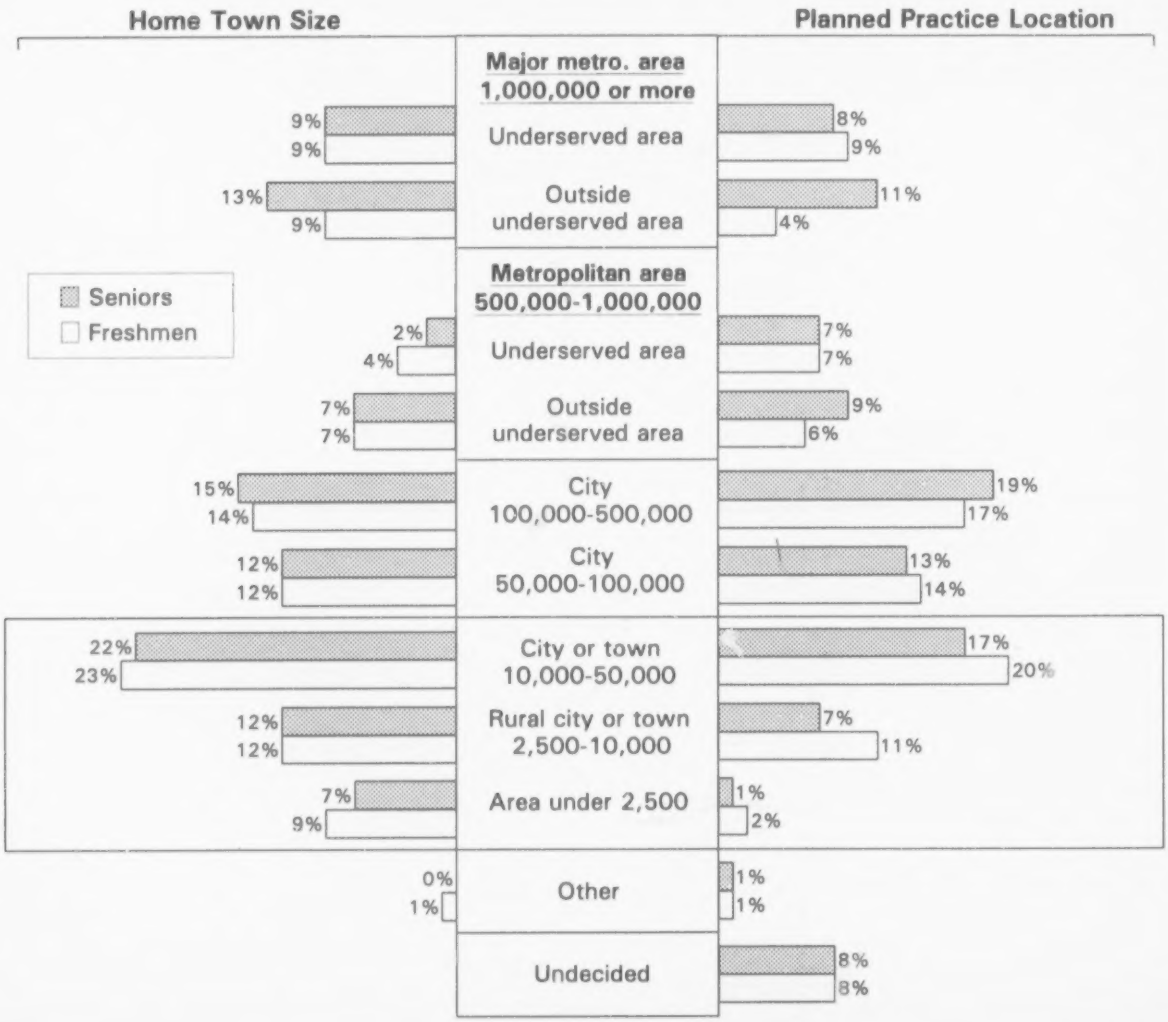
Debt and Planned Location

There are a multitude of reasons for students' location decisions, and the topic has not been fully investigated. However, AACOM's previous surveys of freshmen and seniors have revealed a fairly strong tendency for those who are heavily in debt to plan to locate in larger communities, where, presumably, the income potential is larger.

This year's survey results show that more seniors than last year were influenced by heavy debt

Figure 12
Hometown Size and Planned Practice Location

52% of seniors and 57% of freshmen come from small towns or underserved areas of large cities; 40% of seniors and 49% of freshmen plan to practice in those types of locations.



loads in connection with their planned practice locations. For 1992-93 seniors, 56% said debt had some influence on planned location. Last year the comparable figure was only 37%. Those seniors who said that debt exerted considerable influence on their immediate location choice were much less willing than others to practice in underserved areas.

Previous surveys have also demonstrated a connection between size of hometown and size of the planned practice location. As can be seen in Figure 12, both freshmen and senior students tend to plan to practice in locations that are similar in size to their home towns.

It is fairly common for osteopathic medical school graduates to practice in the same state in which they attended medical school. In 1993, for example, about 46% of seniors planned to do that. Freshmen also had similar plans, with about 44% planning to practice in their school's state.

In 1993, Texas was the state most frequently cited by seniors as their planned practice location. Other states frequently cited were Florida, Illinois, New York, California, Michigan, New Jersey, Pennsylvania, Ohio, and Oklahoma (Table 3).

Photo courtesy of Oklahoma State University College of Osteopathic Medicine

Table 3
Most Frequently Cited States for the Planned Practice Location of 1993 Seniors

1993	1992	1991	States with the Most Osteopathic Physicians in 1993[1]
1. TX	NY	TX	MI
2. FL	CA	NY	PA
3. IL	PA	OH	OH
4. NY	MI	PA	FL
5. CA	FL	CA	NJ
6. MI	TX	MI	TX
7. NJ	OH	NJ	NY
8. PA >tie	NJ	MO	MO
9. OH	MO	FL	CA
10. OK >tie	WV	WV	IL

[1]Distribution of osteopathic physicians is from American Osteopathic Association.

III. The Survey

This 12th annual AACOM study of debts and career plans of students at the 15 member colleges of osteopathic medicine was prepared with the assistance of school administrators and faculty. It focuses mainly on the financial and indebtedness situation of osteopathic medical students, but also provides data on their background, career aspirations, and plans.

The current survey was based on random samplings of freshmen and a majority of seniors in each osteopathic medical school during the 1992-93 academic year. From a class of 2,035 freshmen, 721 responses were reviewed and tabulated, representing 35.4% of the class. The target was 25%. A larger sample of the 1,620 seniors was requested and received. Questionnaires were tabulated for 1,183 seniors. However, due to a faulty mailing address, the responses from seniors at the Kirksville school (KCOM) did not arrive, so the debt and scholarship data from last year's KCOM seniors were used to impute the responses for the missing 1993 cohort. The imputed responses were derived by multiplying the 1992 debt and scholarship data for KCOM seniors by the 1993/1992 ratios computed from all other seniors. Without the responses of the KCOM seniors, the response rate dropped to 66% from almost 68% last year.

This survey is designed primarily to gather information about the educational debt of freshmen and seniors. For freshmen, the debts reported here represent the amount estimated to be incurred by the time of graduation. Therefore, it is only a rough estimate of the debt burden freshmen actually will have at graduation. For seniors, the data reported here reflect a more accurate picture of debt at graduation. All data refer to debts incurred to finance the students' undergraduate college and osteopathic medical education. Consumer debt for cars, clothes, and other personal items is not included.

An attempt has been made to keep the data and format of this report consistent with prior annual reports produced by AACOM. As in most previous reports, average debt figures presented here include those students with no debt, unless otherwise noted in the text.

When discussing scholarships and grants, it is often desirable to know the amount per grant rather than the amount per student (which would include students with no grants). Again, the text clearly defines which denominator was used.

AACOM is grateful to the osteopathic medical schools, their staff, and students for the assistance they provided to make this survey possible. It was prepared by Allen M. Singer, Ph.D., Director of Research, with assistance from Lorrie Van Akkeren, AACOM's Statistical Assistant who handled the data entry and prepared the charts and figures. Bonnie McCormack, Ted Cron, and Marian Osher provided editorial and layout assistance.

Photo courtesy of Kirksville College of Osteopathic Medicine

IV. Publications Available from AACOM

AACOM Organizational Guide — structure of the Association, names and addresses of members of its councils/sections/committees, and administrative staff and faculty in the 16 U.S. colleges of osteopathic medicine.

$14.00

Annual Statistical Report — compilation of annual trends among the colleges of osteopathic medicine. Presented in tables and charts with accompanying text, the statistical data relate to the characteristics of applicants and matriculants, faculty, curriculum, sources of grants and loans, and distribution of revenues and expenditures.

$13.00

Application Packet — application form for the centralized application service, procedures for applying, and materials describing each college and its fees.

No charge

College Information Booklet — brief description of each of the 16 osteopathic medical colleges, admissions criteria, minimum entrance requirements, supplementary application materials required, class size or enrollment, application deadlines, and tuition.

Single copies: $2.00
25 copies: $25.00
100 copies: $74.00

Debts and Career Plans of Osteopathic Medical Students — detailed survey that examines indebtedness of osteopathic medical students at the 16 osteopathic medical colleges. The characteristics and career plans of students are compared at their entrance to osteopathic medical school and just prior to their graduation.

$12.00

Education of the Osteopathic Physician — comprehensive book providing information about the history and philosophy of the profession. This is an essential guide for the health professions advisor and the prospective student of osteopathic medicine. Provides admissions criteria and brief overviews of the 16 osteopathic medical schools, information on the educational process (medical school through internship and residency), licensure, and practice options.

$9.00

Osteopathic Medical Education — single copies of this brochure presenting an overview of the profession are free.

50 copies: $9.00
100 copies: $15.00

Osteopathic Medical Education: A Handbook for Minority Applicants — provides summary accounts of the osteopathic profession, pathways to osteopathic education, and the educational and training programs of the osteopathic colleges.

Single copies: $1.00
25 copies: $15.00
100 copies: $65.00

Selected Sources of Financial Aid for Osteopathic Medical Students — brief overview of the range of financial aid sources available to osteopathic medical students and a guide to contacts on financial aid.

Single copies: $8.00

Study on Competency-Based Objectives for Undergraduate Osteopathic Medical Education — minimum clinical competencies expected of a newly graduated osteopathic physician, component elements contributing to those competencies, and timetable for their introduction and/or completion. Competency objectives for medicine, surgery, pediatrics, obstetrics/gynecology, and general and family practice are identified.

$18.00